DOCUMENT RESUME

ED 386 895 EC 304 288

AUTHOR Mattson, Beverly
TITLE Models of Personnel Needs Assessment.
INSTITUTION National Association of State Directors of Special Education, Alexandria, VA.
SPONS AGENCY Department of Education, Washington, DC.
PUB DATE Oct 95
CONTRACT H029V30001
NOTE 68p.
PUB TYPE Guides - Non-Classroom Use (055) -- Information Analyses (070)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Compliance (Legal); *Disabilities; Educational Legislation; Elementary Secondary Education; Federal Legislation; Federal Regulation; Models; *Needs Assessment; Postsecondary Education; Professional Continuing Education; *Professional Development; *Special Education; *Staff Development; Teacher Education; Training Objectives
IDENTIFIERS *Comprehensive System of Personnel Development; Individuals with Disabilities Education Act; Rehabilitation Act Amendments 1992

ABSTRACT

This report presents samples of models and strategies for determining professional development needs of special education personnel. The following areas are covered: definitions of needs and the needs assessment process; personnel needs assessment regulations under the Comprehensive System of Personnel Development, the Individuals with Disabilities Education Act, and the Rehabilitation Acts; steps in conducting a needs assessment; guidelines for sampling; features of various needs assessment models, including definitions, data sources, steps for implementation, and examples; aspects of a comprehensive needs assessment process including an example from one state education agency; processes for integrating and prioritizing needs across data sources; guidelines for the use of surveys; and additional resources on needs assessment. The following needs assessment models are considered: Consumers' Felt Needs Model, Social Marketing Model, Components of Training Needs Model; Identification of Needs by Experts Model, Comparative Needs Model; Discrepancy Model; Needs Identification through Review of Student Outcomes and School Operations and Outcomes; Needs Identified through Review of System Operations and Outcomes; and Resource Inventory Model. Appendices offers tips on the use of surveys and a list of additional resources on needs assessment. (Contains 27 references.) (SW)

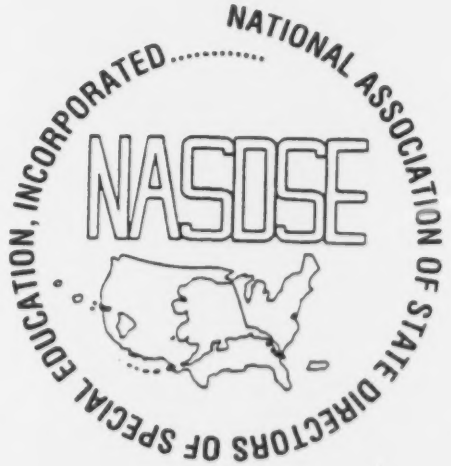
****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 386 895

MODELS OF PERSONNEL NEEDS ASSESSMENT

By Beverly Mattson, Ph.D.
Networking System for Training Education Personnel



1800 Diagonal Road, Suite 320
Alexandria, Virginia 22314

October, 1995

EC 304388

BEST COPY AVAILABLE

This report was supported in whole or in part by the U.S. Department of Education (Cooperative Agreement No. H029V30001). However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Department of Education, and no official endorsement by the Department should be inferred.

TABLE OF CONTENTS

Page

Introduction 1

Section I: Definitions 3

Section II: Generic Steps in Conducting a Needs Assessment Process 4

Section III: Federal Requirements for Data on Personnel Needs 5

Section IV: Guidelines for Sampling 8

Section V: Models of Needs Assessment 11

- Consumers' Felt Needs Model 11
- Social Marketing Model 14
- Components of Training Needs Model 16
- Identification of Needs by Experts Model 17
- Comparative Needs Model 20
- Discrepancy Model 22
- Needs Identified Through Review of Student Outcomes and School Operations and Outcomes 24
- Needs Identified Through Review of System Operations and Outcomes 26
- Resource Inventory Model 28

Section VI: Comprehensive Needs Assessment Process 31

Section VII: Analyzing and Prioritizing Needs 44

Section VIII: Communicating the Results of Needs Assessment 48

References 49

Appendices

- Tips on the Use of Surveys 52
- Additional Resources on Needs Assessment 53

INTRODUCTION

As part of its work scope, the Networking System for Training Education Personnel (NSTEP), is to provide technical assistance and information services to state education agencies regarding the Comprehensive System of Personnel Development (CSPD). One of the components within CSPD is the assessment of personnel needs. The intent of this document is to provide guidelines and present samples of different models and strategies that can be used in the process of determining personnel needs, particularly professional development needs[1].

The document is divided into eight sections. Readers can pick and choose which sections to read and use.

The first section defines needs, the process of needs assessment, and models of needs assessment. Regulations regarding the Comprehensive System of Personnel Development and assessment of personnel needs under the Individuals with Disabilities Education Act and the proposed regulations for the Rehabilitation Acts are presented in the second section. The third section briefly presents the general steps in conducting a needs assessment process. Guidelines for sampling are presented in the fourth section.

The fifth section describes various models of needs assessment, including definitions, data sources, steps for implementation, and examples. Wherever possible, examples of current uses of needs assessment processes from state education agencies are presented. Some of the models use information from and about personnel to identify needs while others are oriented toward student outcomes, school operations and outcomes, and system operations and outcomes. One of the most common approaches used currently is the *Consumers' Felt Needs Model* which identifies preferences and immediate needs of personnel. The *Social Marketing Model* identifies the needs, wants, and desires of a target audience and builds social marketing interventions based on the audience's understanding of the problem. The *Components of Training Needs Model* takes into account personnel preferences but also includes their current level of competence and the relevance of the training topic to the current position. The *Identification of Needs by Experts Model* relies on recommendations by experts, research or professional organizations. The *Comparative Needs Model* uses standards or quality indicators, and assessment of personnel's level of competency on assessments of standards to determine needs. The *Discrepancy Model* compares personnel performance expectations with results of personnel evaluations to determine needs. The *Needs Identified Through Review of Student Outcomes and School Operations and Outcomes Model* incorporates not only personnel data, but also includes other individuals, sources of data, and outcomes for indicators of needs. The *Needs Identified Through Review of System Operations and Outcomes Model* analyzes the outcomes, components, and processes of a system to determine which areas need improvement. The *Resource Inventory Model* analyzes current uses of available training and continuing education activities to determine needs.

---

[1]Models for determining personnel supply and demand data are described in NSTEP's document, A Report on the Personnel Supply and Demand Data Collected by States, 1994.

The sixth section describes the features of a comprehensive needs assessment process and presents an example from one state education agency. Processes for integrating and prioritizing needs across data sources are presented in the seventh section. References are included in the eighth section. The appendices include brief guidelines on the use of surveys and a list of additional resources on needs assessment.

SECTION I: DEFINITIONS

Definition of a Need

A need is defined as a discrepancy between an existing set of conditions and a desired set of conditions (Borg & Gall, 1989). Needs are possessed by a particular group of people in a certain set of circumstances so that a description of a target population and the environment are important components of needs assessment.

Professionals at various levels of a system will recognize different needs. Sometimes the person recognizing a need may vary from the person experiencing the need.

Roth (1977) defines five desired states: ideals, norms, minimums, desires, and expectations. A need can be a discrepancy between an actual state and one of these five desired states. Needs may involve attitudes, knowledge, competencies or skills, or practices of individuals or components, processes, outcomes of organizations (e.g., schools) or systems.

Definition of a Needs Assessment Process

A needs assessment process is a process which "identifies needs and decides upon priorities among them." (Encyclopedia of Educational Evaluation).

The use of a needs assessment process can help decision making by clarifying what needs are important and their level of importance (McKillip, 1987). A needs assessment process involves using formal analytic tools in order to:

- identify gaps between current results and desired outcomes;
- identify unique strengths and areas of excellence;
- set priorities among needs; and
- select priorities for change efforts.

Definition of a Needs Assessment Model

A needs assessment model outlines data sources and steps for implementing a needs assessment process, including the collection and analyses of needs.

SECTION II: GENERIC STEPS IN CONDUCTING A NEEDS ASSESSMENT PROCESS

The following list of generic steps are common to all models of needs assessment (adapted from McKillip, 1987):

(1) Identify users and uses of the needs assessment process. The users are individuals who will be acting on the information collected through a needs assessment process. Knowing the users and what kind of information they desire is helpful when focusing on and choosing the types of needs and models;

(2) Identify and describe the target population and their environment for the needs assessment process. It is important to consider who will be the focus of the needs assessment process, their demographic characteristics, geographic dispersion, etc, and important features of their environment which may be impacting needs;

(3) Select the sampling procedures, and the type and size of the sample;

(4) Select model(s) of needs assessment to use. The model identifies data sources, procedures for collecting information, and procedures for analyzing needs;

(5) Draw the sample;

(6) Implement the procedures of the selected needs assessment model;

(7) Integrate the information from various data sources and prioritize;

(8) Analyze the results of the needs assessment; and

(9) Communicate the results of the needs assessment process to decision makers, users, and other relevant audiences.

SECTION III: FEDERAL REQUIREMENTS FOR DATA ON PERSONNEL NEEDS

Individuals with Disabilities Education Act, Part B

The components of the Comprehensive System of Personnel Development are set forth in federal regulations (Sections 300.139 and 300.380-300.383) under the Individuals with Disabilities Education Act. According to these sections, each state plan is to describe their personnel development system which addresses current and projected personnel needs, recruitment, retention, the preparation of qualified personnel, an adequate supply of qualified personnel, assurances that there is a system for personnel preparation and continuing education, and data on qualified personnel and personnel development.

Personnel includes: audiologists, counselors, diagnostic and evaluation personnel, home-hospital teachers, interpreters for students with hearing impairments, occupational therapists, physical education teachers, physical therapists, psychologists, rehabilitation counselors, social workers, speech-language pathologists, teacher aides, recreation and therapeutic recreation specialists, vocational education teachers, work-study coordinators, and other instructional and non-instructional staff.

A system must be in place so that on an annual basis, the institutions of higher education within the state which are preparing special education and related services personnel, maintain numbers of students enrolled in programs and the numbers of students who graduated during the past year with certification or licensure, or with credentials to qualify for certification or licensure.

Section 300.382, Personnel Preparation and Continuing Education, requires each state plan to include a description of the procedures and activities the State will undertake to ensure that **all** personnel necessary to carry out this part are appropriately and adequately prepared. The procedures and activities must include:

(a) a system for the continuing education of regular and special education and related services personnel to enable these personnel to meet the needs of children with disabilities under this part;

(b) procedures for acquiring and disseminating to teachers, administrators, and related services personnel significant knowledge derived from education research and other sources; and

(c) procedures for adopting, if appropriate, promising practices, materials, and technology, proven effective through research and demonstration.

Section 300.383 requires states to maintain annual data on qualified personnel, including: number and type of personnel employed by profession or discipline; number and type of personnel employed with emergency, provisional, or temporary certification in each profession who do not hold appropriate State certification, licensure or other credentials.

Individuals with Disabilities Education Act, Part H

Section 303.360, Comprehensive System of Personnel Development, requires a personnel development system that is consistent with Part B of the Act and provides for preservice and inservice training on an interdisciplinary basis of a variety of personnel (including public and private providers, primary referral sources, paraprofessionals, and persons serving as service coordinators). In addition, the training provided must relate specifically to:

(a) understanding the basic components of early intervention services available;

(b) meeting the interrelated social or emotional, health, developmental, and educational needs of eligible children;

(c) implementing innovative strategies and activities for the recruitment and retention of early intervention service providers;

(d) promoting the preparation of early intervention providers who are fully and appropriately qualified to provide early intervention services;

(e) training personnel to work in rural areas; and

(f) training personnel to coordinate transition services for infants and toddlers with disabilities from an early intervention program to a preschool program under Part B.

Proposed Rehabilitation Act Regulations

The proposed regulations of the Rehabilitation Act Amendments of 1992 and 1993 (P.L. 102-569 and P.L. 103-73) require similar personnel requirements as in IDEA.

Section 361.18, Comprehensive System of Personnel Development, requires the state agency to establish and maintain a comprehensive system of personnel development designed to ensure an adequate supply of qualified rehabilitation personnel, including professionals and paraprofessionals. The State Plan must describe the development and maintenance of a system for collecting and analyzing on an annual basis data on qualified personnel, number of personnel employed in relation to number of individuals served; number of personnel needed by categories; and projections of number of personnel needed in five years.

Data on personnel development includes a list of institutions of higher education preparing vocational rehabilitation professionals by types of programs, number of students enrolled by types of programs, number of students graduated during the prior year with certification or licensure; and data assessing the need for personnel development on the provision of transition services to transitioning students.

Regarding staff development, the State Plan must set forth the agency's policies and describe the procedures and activities the agency will undertake to ensure that all personnel employed by the state unit receive appropriate and adequate training, including a description of:

a system of staff development for rehabilitation professionals and paraprofessionals within the state unit, particularly with respect to rehabilitation technology; and

procedures for acquiring and disseminating to rehabilitation professionals and paraprofessionals significant knowledge from research and other sources, including procedures for providing training.

In addition, the State Plan is to describe procedures and activities the SEA will undertake to coordinate its comprehensive CSPD with personnel development under IDEA, including:

the manner in which personnel responsible for personnel development under IDEA will be involved in the development of CSPD, including the development of standards; and

the procedures the SEA will undertake to ensure that all appropriate personnel receive adequate continuing education in the provision of vocational rehabilitation services, including transition services to transitioning students; and that continuing education be documented jointly with personnel under IDEA as appropriate.

SECTION IV: GUIDELINES FOR SAMPLING

DEFINITION OF SAMPLING: Selection of a given number of individuals, organizational units, or special groups from a defined population as representative of that population.

After defining the target population for the needs assessment process, it is important to derive a sample of personnel representative of that population. One needs to consider the size of the sample and the type of sample.

It is important to ask the following questions in determining a sample (Henry, 1990):

How can I select a sample that will be used to represent the population?

What subpopulations or special groups should be represented?

What geographic regions and factors should be represented?

What percentages of personnel should be considered?

How will I judge whether the sample represents the population well?

Sample Size

The appropriate size of a sample will depend on the amount of certainty you need, the nature of the population, how much time you have to spend, and the nature of the information collected. The general rule is to use the largest sample possible. Larger samples are especially necessary when many uncontrolled factors are present, when groups must be broken into subgroups, or when the population is highly heterogeneous. Kingery (1988) identifies the following guidelines in determining sample size:

If total number of people in specific group to be surveyed is:	...then the percentage of those included in the sample should be:
under 150	100%
151-250	75%
251-500	50%
501-1,000	40%
1,001-3,000	30% (but no more than 700)
3,001-6,000	25% (but no more than 1200)
more than 6,000	20% (but no more than 2000)

Types of Samples

(1) A **convenience sample** is based on volunteers who are selected because of their availability. (Volunteers are usually better educated than nonvolunteers);

(2) A **systematic sample** is formed by determining the sample size, assigning members of the population numbers, determining the selection interval, selecting a random number to start with, and selecting each member of the population that appears at the selected interval;

(3) A **random sample** is one in which each individual in a defined population has an equal chance of being included. (An easy way to select a predetermined portion of a population is to use a table of random numbers for all members of a group, and then use the table to select the numbers);

(4) A **quota sample** is based on subgroups of a population and is drawn from certain population categories. For example, samples of teachers could be drawn randomly from predetermined lists representing different content/subject matter, grade levels, school levels, school sizes, and geographical areas. The quota sample assures that low-incidence subpopulations will be included; and

(5) A **stratified sample** is drawn from each level of strata (for example, different grade levels, different positions -- teachers, administrators). Geographical stratification factors include: rural/urban areas, city or town sizes, sizes of local education agencies, service geographical areas.

Procedures for High Nonresponse Rates

Nonresponse rates of 10 to 20% of a sample will produce significant bias (Henry, 1990). A small number of individuals should be selected randomly from the nonresponding group and interviewed. A sample study of nonrespondents should be conducted after follow-up strategies have been tried. If more than 20 percent are missing, select a small number of people from the nonresponding group, and try a telephone interview. Compare the results with the responders.

State Examples:

Connecticut's Geographical Sampling Matrix. The basic matrix included sampling the six principal regional educational service areas and six types of communities, i.e., large city, fringe city, medium city, small town suburban, small town emerging suburban, and small town rural.

State Examples (continued):

Colorado's Staggered Personnel Sampling involves a continuous needs assessment of the various groups of parents and professionals in the following sequence:

(a) First Year: General education teachers and special education directors;
(b) Second Year: All related services personnel;
(c) Third Year: Special education teachers and principals; and
(d) Fourth year: Parents and Paraprofessionals.

References:

Colorado Department of Education. (1994). Fiscal Years 1995-97 State Plan under Part B of the Individuals with Disabilities Education Act as Amended by Public Law 94-142. Denver, CO: Author.

Connecticut State Department of Education, Division of Education Support Services (1993). State plan for the Individuals with Disabilities Education Act, Fiscal Years 1993-1995. Middletown, CT: Connecticut State Department of Education, Division of Education Support Services, Bureau of Special Education and Pupil Personnel Services.

Henry, G. (1990). Practical sampling. Newbury Park, CA: Sage Publications.

Kingery, D. (1988). Needs assessment in special education: Survey administration. In Planning a Needs Assessment Management System (PANAMS). Athens, Ga: University of Georgia, Project PANAMS.

SECTION V: MODELS OF NEEDS ASSESSMENT

CONSUMERS' FELT NEEDS MODEL

DEFINITION: A model whereby consumers or special education personnel identify their own needs for additional preparation or continuing education. Felt needs depend on the insight that a target population has into their own strengths, weaknesses, and needs. Usually, the needs represent preferred needs of personnel (needs they feel most comfortable in identifying).

Data Sources:

(1) Completion of surveys by targeted personnel (face-to-face, phone, mail);

(2) Personnel Development Plans (individual and by local education agencies);

(c) Self-administered questionnaires and/or studies (school improvement plans);

(d) Technical assistance requests;

(e) Needs identified through continuing education offices of colleges and universities; and

(f) Recommendations of ad hoc groups (e.g., advisory groups).

Steps in Implementing the Model:

The steps in implementing the model depend on chosen procedures for collecting data:

(1) Collect the data (procedures for collection will vary);

For example, one may collect information by having various representative personnel complete surveys, self-administered questionnaires, or develop Personnel Development Plans. Other procedures for collecting information include reviewing current sources of information (e.g., technical assistance requests by personnel or needs identified through Continuing Education offices of colleges or universities). A third procedure is to form ad hoc groups and then identify needs.

(2) Analyze the data; and

(3) Develop recommendations.

State Examples:

(1) **Use of Surveys**. In the Fall and Winter, 1989, the Georgia Department of Education, Division for Exceptional Students mailed prestamped surveys from the PANAMS (Planning a Needs Assessment Management System) In-service Training and Staff Development Survey to approximately 2500 educators (special education teachers, special education administrators, psychologists, paraprofessionals, general education teachers, counselor/social workers, and general education administrators, preschool projects, DHR corrections centers, and three state schools) through the Georgia Learning Research Systems network. Questionnaire items included identification of major professional responsibility, years of experience, school level, exceptionalities service, certification areas, and a list of 3-10 areas in which they would most like training to occur. The 10 areas were: assessment, due process, IEP development, educational programming, educational administration, service delivery, parent involvement, CSPD, compliance/services, and technology. Analyses revealed training priorities by each subgroup and across all groups. For each area of training, respondents were asked to indicate level of need for training (great, some, little, none) for subtopics. In addition, the questionnaire asked for preferences as to financial reimbursement, formats, and ranked incentives for increasing motivation for staff development. Finally, respondents were asked to identify one training area which represented their highest need in five or more years.

(2) **Analysis of Surveys.** The State of Louisiana also used the PANAMS Survey to collect data. Analysis of the PANAMS Needs Assessment System resulted in the Department of Education identifying the following preferences across all subpopulations:

(a) Highest Priorities for Training Now (e.g., IDEA Policies and Procedures; Assessment; Transition);

(b) Highest Priorities for Training in Three-Plus (3+) Years (e.g., Transition; IDEA Policies and Procedures; Service Delivery; Communication and Cooperative Efforts);

(c) Best Format for Training (e.g., Regular Workday; Conference/Workshops; University Credit; Evening/Weekend Courses and Self-instructions);

(d) Most Effective Resource for Training (e.g., State Specialists; experienced locals; Master Teachers; Professional Organizations; University Trainers); and

(e) Strategies to Increase Participation (e.g., Pay/Waiver of Fees; Travel Reimbursement; Continuing Education Units; Stipend for Course Credit; Pay for Books/Materials; Recognition; Certificate in Personnel File).

(3) **Use of Ad Hoc Group**. The Connecticut CSPD Council held several forums on assistive technology. They invited 78 representatives from interested professional groups and parents. During the forums, participants formed small groups and addressed the following questions:

What are the current issues and service/resource gaps that exist for state coordination, training/personnel development, collaboration/interagency coordination, and resources?

What are the major service, training, and technical assistance needs (methods, topics, incentives) in terms of preservice and continuing education?

How can we collaborate and coordinate resources through the central and regional resource centers, interagency coordination, coordination with state initiatives, and training?

After analyzing the issues and recommendations, Connecticut developed a statewide directory of current agency and individual providers of assistive technology services. They are in the process of developing action plans for each of the three questions.

References:

Connecticut CSPD Council. (1994). Assistive Technology Forum. Middletown, CT: Special Education Resource Center.

Georgia Department of Education, Office of Special Services, Division for Exceptional Students. (1993). Special Education State Program Plan FY 94-96. Atlanta: Author.

Louisiana Department of Education, Office of Special Education Services. (1994). Louisiana Special Education State Plan for Fiscal Years 1994-1996. Baton Rouge, LA: Author.

McKillip, J. (1987). Need analysis: Tools for the human services and education. Newbury Park, CA: Sage.

SOCIAL MARKETING MODEL

DEFINITION: Analyses of needs, wants, desires of a target audience in order to implement a planning process which promotes voluntary behavior change.

Data Sources:

(1) Information on targeted audience (e.g., personal and professional demographics); and

(2) Information on current activities and use of activities by targeted audience.

Steps in Implementing the Model:

(1) Identify target population (e.g., instructional personnel) who actually or potentially will use services or population targeted for increased use of training opportunities;

(a) How many potential users of activities are there?

(b) What are the important characteristics of this market? What are they like demographically (e.g., age, level of education)?

(c) What options do professionals have regarding continuing education activities?

(c) What considerations are professionals using to select among competing activities?

(d) Who in the targeted population is most disposed to change?

(2) Research the needs and wants of target markets;

(a) What are the current and anticipated ongoing needs?

(b) What are their interests? Level of interest?

(c) How much does the audience already know?

(d) What misconceptions do they hold?

(e) What fears/barriers do they see?

(f) What channels of communication are most preferred?

(3) Develop a profile of the targeted population, including

(a) Prioritized needs;

(b) Current use patterns;

(c) Attitudes; barriers they perceive; and

(d) Preferred channels of communication.

(4) Complete Strategic Marketing Plan.

(a) Identify goals and objectives (e.g., what will be accomplished and when?);

(b) Identify products, services, and activities;

(c) Identify resources needed (e.g., money, time, staff, materials);

(d) Identify benefits and current barriers for targeted market;

(e) Identify strategies to achieve the objectives (e.g., promotional marketing strategies, channels of communication, benefits); and

(f) Identify how outcomes will be measured (e.g., survey, focus groups, response tracking), and if objectives are not met, what adjustments will be made to the plan?

References:

McKillip, J. (1987). Need analysis: Tools for the human services and education. Newbury Park, CA: Sage.

Savar, C. (1994, May). Power marketing: 7 steps to success. Keynote speech at 1994 CSPD Conference for Leadership and Change, Washington, DC.

Schwartz, B., & Horne, R. (1995, May). CSPD collaboration for change: A social marketing perspective. Presentation at the 1995 CSPD Conference for Leadership and Change, Arlington, VA.

COMPONENTS OF TRAINING NEEDS MODEL

DEFINITION: Model described by Misanchuk (1984) which addresses three components of training needs: competence, relevance of skill, and the individual's desire for training.

Data Sources:

(1) Competence or ability of individuals to perform task (e.g., personnel evaluations, criterion-referenced tests, questionnaires);

(2) Relevance of skill or ability for job (e.g., ratings); and

(3) Individual's desire to undertake training (e.g., review of previous enrollment rates, questionnaires).

Steps in Implementing the Model:

(1) List potential training topics (source from small committee of experts or from literature);

(2) Ask respondents to make the following ratings for each topic on a five-point scale from low to high:
   (a) level of competence of current job holders (what is);
   (b) relevance of topic to current job (what should be); and
   (c) current interest in topic (desire).

(3) Score ratings;
   Five-point scales might be used from low (1) to high (5).

(4) Analyze ratings; and
   Training topics that get an average rating of greater than 3 on relevance and less than 3 on competence are identified as training needs.

(5) Select actual topics from the ratings based on the highest rating, respondents interest, and the cost of providing training.

Reference:

Misanchuk, E. (1984). Analysis of multi-component educational and training needs. Journal of Instructional Development, 7, 28-33.

IDENTIFICATION OF NEEDS BY EXPERTS MODEL

DEFINITION: Model whereby recognized experts in the field identify competencies and areas of training needed by personnel.

Data Sources:

(1) Recommended areas of training, competencies identified by professional organizations or by expert review;

(2) Professional journals which report research findings and recommendations for training content; and

(3) Standards (e.g., Council for Exceptional Children's Standards for Professional Practice in Special Education).

Steps in Implementing the Model (Popham, 1975):

(1) Make a list of recommendations for training and competencies identified by experts and professional organizations. (The experts could also use existing recommendations such as the CEC Standards for Professional Practice in Special Education);

(2) Form a sample expert forum or panel of all professionals who should be represented;

(3) Have each professional rank a manageable number of recommendations in terms of importance from most to least preferred;

Another approach is to have each professional rate a manageable number of recommendations in terms of importance on a five-point scale (5=very important, 4=important, 3=average, 2=unimportant, 1=very unimportant);

(4) Determine average preference ratings by subgroups of professionals;

For example, the subgroups might rate the following CEC standard for communication and collaborative partnerships in the following ways:

	Average Preference Ratings		
Recommendations for training	Teachers	Parents	Administrators
Encourage and assist families to become active participants in the educational team	3.8	4.8	4.0

5=very important, 4=important, 3=average, 2=unimportant, 1=very unimportant

(5) Combine the ratings of all the personnel sampled for all the objectives. For example:

Recommendations	Pooled Preference Ratings
Encouraging and assisting families to become active participants in the educational team	12.6 (total) 4.2 (average)

If you stopped at this point, you would have only preference data. It is important to determine the current state of knowledge among the target population. Needs represent the differences between the recommendations and the current status;

(6) An important step is to determine the actual performance status on measures related to each recommendation; and

For example:

Recommendations for training	Pooled Preference Ratings	Pooled Performance Estimates (e.g., estimates on current level of performance)	Current Ratings of competencies (current level of performance)
Encouraging and assisting families to become active participants in the educational team	4.2	70% of teachers could perform 80% of the competencies demonstrating the standard perform 80% of the competencies demonstrating the standard	Ratings by teachers and parents of current status of the standard

(7) Determine target objectives based on highest pooled preference ratings and the discrepancies between pooled performance estimates and current ratings of competencies.

(A decision needs to be made as to whether these two factors are weighted equally or whether discrepancy data should be weighted more significantly than preference data.)

References:

Council for Exceptional Children. (1994). CEC standards for professional practice in special education. Reston, VA: Author.

Popham, J. (1975). Educational evaluation. Englewood Cliffs, NJ: Prentice Hall.

COMPARATIVE NEEDS MODEL

DEFINITION: Model of determining needs based on expectations for performance of groups of personnel with other groups or standards. For example, ratings on quality indicators or effective schools checklists are used to determine personnel strengths, weaknesses, and needs.

Data Sources:

(1) Standards or quality indicators of personnel competency (e.g., identified professional standards by professional organizations, criteria for excellence); and

(2) Assessment of personnel's level of competency in comparison to standards or quality indicators.

Steps in Implementing the Model:

(1) Identify standards or quality indicators of personnel competencies;

(2) Develop an assessment process to compare personnel's current level of competency in comparison to standards or quality indicators (e.g., standardized tests, simulation activities, personnel evaluations);

(3) Determine criteria or required levels of competency which will meet standards or demonstrate quality indicators; and

(4) Analyze results of the assessment process and the application of criteria or required levels of competency.

State Examples:

(1) The Kentucky Education Reform Act requires all newly hired principals to complete the Principals' Assessment Center program. The program has a contract with the National Association of Secondary School Principals (NASSP) to use their assessment program. Kentucky requires principals to successfully complete assessment activities demonstrating an acceptable level of oral and written communication skills, general knowledge, and professional education concepts related to instructional leadership, management and supervisory skills (e.g., problem analysis, organizational ability, decisiveness, stress tolerance). Assessors observe, record, and analyze individuals as they complete a variety of assessment activities (e.g., simulations, interview, fact-finding exercises) which measure generic skills dimensions. The assessors produce a final report that identifies the strengths, improvement needs, and suggestions for each participant's development. In addition, principals must pass a test, Kentucky Specialty Test of Instructional and Administrative Practices, at a competency level of 85%. The test assesses knowledge of current instructional and administrative practices in Kentucky.

(2) The Utah Preschool Special Education Certification project (Innocenti, Killoran, & Christensen, 1994) assessed the correspondence between perceived needs and demonstrated skills of all eligible teachers. First, teachers' perceptions of their current skills were assessed in five areas: child and family assessment, infant and child development, atypical development, family intervention and involvement, and intervention strategies. Shortly afterwards, teachers were provided opportunities to take written tests which assessed their skill-mastery in each of the five areas. (The skills assessment could be used to demonstrate mastery in a given area and forego training options). The Utah Project found that many teachers had a knowledge of skills in each competency area, but not necessarily at the implementation level. In fact, the Project found that the teachers who rated their skills as highest were the least likely to obtain scores on the skills assessment that corresponded to the initial assessment.

References:

Innocenti, M., Killoran, J., & Christensen, J. (1994). Let's do a needs assessment: A cautionary note. The Utah Special Educator, 14, 21.

Kentucky General Assembly, Office of Education Accountability. (1994). Annual report. Frankfort, KY: Author.

National Association of Secondary School Principals. Searching for excellence: Assessment and development programs provide solutions. Reston, VA: Author.

DISCREPANCY MODEL

DEFINITION: Model based on goal setting, performance measurement, and identification of differences or discrepancies. The formula for the model is:

Desired status of Professionals	minus (-)	Current Status of Professionals	equals (=)	Educational Needs

Data Sources:

(1) Personnel performance expectations (e.g., job descriptions, factors identified on personnel evaluations); and

(2) Results of personnel evaluations (e.g., ratings, observations, work samples).

Steps in Implementing the Model:

(1) Initially, personnel performance expectations are derived and described. Often an expert group reviews and determines desirable performance that may reflect minimal skills, useful skills, or standards;

(2) Performance expectations are obtained for each of the performance dimensions from a second group of experts;

(3) Actual outcomes of personnel on each of the performance dimensions are determined;

(4) Personnel performance is analyzed by asking questions, such as:

At what levels are the trainees' current knowledge and skills?

Are the trainees likely to have any major misconceptions in the subject matter?

What are the general attitudes of trainees toward the subject?

(5) Then, compare level of measured personnel performance with levels judged acceptable;

(6) Examine the gaps or discrepancies found between current status and what is desired;

(7) Complete a descriptive analyses of discrepancies by:

(a) Describing the discrepancies in clear, concise, problem statements;

(b) Determining the reasons for discrepancies;

(c) Categorizing the problems and prioritizing the discrepancies;

(d) Specifying what evidence would indicate the problem has been addressed (the desired outcome); and

(8) Identify training content that would address the discrepancies by considering:

(a) What activities have the greatest potential for addressing the discrepancies;

(b) What activities have support through the implementation and institutionalization phases;

(c) What is supported by adjustments in organizational or administrative structures.

Reference:

McKillip, J. (1987). Need analysis: Tools for the human services and education. Newbury Park, CA: Sage.

NEEDS IDENTIFIED THROUGH REVIEW OF STUDENT OUTCOMES AND SCHOOL OPERATIONS AND OUTCOMES

DEFINITION: Model whereby personnel development needs are determined based on analyses of student or client outcomes and school operations and outcomes.

The National Staff Development Council (1994) provides one example of a school improvement team determining data-driven needs for training by analyzing educational outcomes. This is an adapted version of their example.

Data Sources:

(1) Student outcome data (e.g., achievement scores, grade-point averages and grade distributions, graduation rates, retention rates, attendance rates);

(2) Student affective data (e.g., hours of parent involvement, students' attitudes toward school, school vandalism costs, student enrollment in extracurricular activities, disciplinary actions);

(3) School operations data (e.g., percentages of students referred and identified for special education and other specialized programs or services, school-community relations, use of resources, processes, funding, time allotments, and outcomes of staff development activities); and

(4) School outcome data (e.g., personnel evaluation data or performance appraisals, follow-up data on outcomes for former students).

Steps in Implementing the Model:

(1) A school improvement team clarifies its standards for success and the data that would be most useful in measuring them;

(2) The team evaluates the current data against the standards and makes sure that all subgroups of students are equally successful in achieving the standards. The team examines the gaps or discrepancies between what the data indicate and what is desired;

(3) The team describes the discrepancies in clear and concise problem statements, determines the causes of the discrepancies, and categorizes and prioritizes the problems;

(4) The team specifies the evidence that would indicate the problems or discrepancies have been addressed; and

(5) The team determines the prioritized content for staff development by selecting topics that address the discrepancies and:

- have the greatest potential for improving student learning;
- have support through the implementation and institutionalization phases;
- have strong advocates at the school and district level; and
- are supported by needed adjustments in the organizational or administrative structure.

Other Possible Data Sources:

(1) Gaps between adequate and inadequate job performance of personnel;

(2) The extent to which all students with disabilities are integrated into general education classes and activities with nondisabled peers; and

(3) Vocational training programs data.

State Example:

Kentucky's Office of Education Accountability reviewed the school professional development plans for nine schools (3 elementary, 3 middle, and 3 high schools) making the greatest progress in achieving specified outcomes with nine representing the largest regression on the KIRIS (Kentucky Instructional Results Information System) testing. The KIRIS testing is a statewide performance-based assessment program measuring what students know and how well they can apply that knowledge. The review determined what differences existed in the school professional development plans that could be related to KIRIS scores. The plans had to address: identified needs, objectives, planning process, districts' instructional improvement goals, descriptions of professional development experiences, and how the master plan will be evaluated.

References:

Kentucky General Assembly, Office of Education Accountability. (1994). Annual report. Frankfort, KY: Author.

National Staff Development Council. (1994). National Staff Development Council's Standards for Staff Development: Middle Level Edition. Oxford, Ohio: Author.

NEEDS IDENTIFIED THROUGH REVIEW OF SYSTEM OPERATIONS AND OUTCOMES

DEFINITION: Model whereby analyses of the processes, operations, and outcomes of a system or organization are reviewed and analyzed to determine which performance indicators, processes, and outcomes need improvement.

Data Sources:

(1) System indicators (e.g., review of formal complaints to State Education Agencies and other monitoring agencies; review of monitoring citations);

(2) Review of issues raised in due process hearings.

Steps in Implementing the Model:

(1) Identify all topics of complaints, monitoring citations, and issues;

(2) Rank order topics according to frequencies. Determine personnel involved and responsible for these components;

(3) Analyze data to determine topics for additional training, professionals to be targeted, and competencies for professionals; and

(4) Identify what the system must do to change the data (e.g., decrease numbers and types of complaints). Translate these into specific staff knowledge and competencies for targeted outcomes of training activities.

State Examples:

(1) Louisiana used a complaint management tracking system which includes analysis of complaints received and their disposition; results of LEA compliance reviews; results of federal compliance reviews; analyses of annual school reports; and analyses on minimum foundation program reports to determine critical shortage areas for pupil evaluations.

(2) Kansas used five major methods to determine priorities. First, Kansas analyzed all compliance monitoring citations given to local education agencies during the year according to average numbers, and numbers of citations in each major area. They rank-ordered the citations and developed a prioritized list of training needs (e.g., least restrictive environment, IEPs, pre-assessment team procedures).

Second, Kansas categorized and analyzed all calls entered into the Parent Call Database during FY 1993 and rank-ordered the number of calls per category to determine priority training topics, for example, Free Appropriate Public Education (FAPE), Least Restrictive Environment, Individual Education Programs, comprehensive evaluations.

Third, Kansas categorized and analyzed formal complaints to the Kansas State Board of Education during FY 1993 and identified the top-ranked issues, for example, provision of services for students with disabilities, placement in the least restrictive environment, and FAPE.

Fourth, Kansas categorized and analyzed the issues presented in due process hearings in FY 1995.

Fifth, Kansas analyzed issues identified through a U.S. Department of Education, Office of Special Education Programs On-site visit.

Finally, Kansas summarized the data according to the highest ranked issues across all data sources and identified which personnel would receive training on the topics.

References:

Kansas State Board of Education. (1994). Comprehensive System of Personnel Development Needs Assessment Process. Topeka, KS: Author.

Louisiana Department of Education, Office of Special Education Services (1994). Louisiana Special Education State Plan for Fiscal Years 1994-1996. Baton Rouge, LA: Louisiana Department of Education, Office of Special Education Services.

RESOURCE INVENTORY MODEL

DEFINITION: Model which uses a resource inventory to assess current services and activities available to a target population in order to identify gaps in activities and services and underutilization.

Data Sources: Resource Inventory which describes the current continuing education activities and services available.

Steps in Implementing the Model:

(1) Complete a **Resource Inventory** (McKillip, 1987) which describes the current activities and services available;

(a) Who is sponsoring and providing continuing education activities? What percentages of activities are being provided by local education agencies, institutions of higher education, professional associations, and state education agencies?

(b) What types of activities are being provided? What activities are linked to personnel evaluation? What activities are linked to recertification?

(c) How many activities are being provided for each content area?

(d) What content subjects are being covered?

(e) What content areas and activities have been repeated for 3-5 years?

(f) What geographic areas are being served?

(g) What organizations have been involved and represented?

(h) What types of staff are being served?

(i) What percentages of total staff are taking advantage of ongoing activities?

(j) How much is allocated for direct state and local expenditures on professional development activities? How much money is staff personally spending on professional development?

(k) Can additional activities be provided? What types?

(l) How much time is set aside for professional development activities?

(2) Develop a matrix which identifies primary target groups and their current use of services and activities. Services and activities may be organized geographically, by agency, by topics, by types of activities or services, or how much of a service or activity is offered (e.g., number of events). For example, the following matrix identifies enrollment of personnel by categories in graduate courses at institutions of higher education;

IHE continuing education courses in targeted topic over 2 years	General Education Teachers	Special Education Teachers	Administrators
State University	20%	40%	5%
Central College	15%	35%	8%
Southern University	11%	22%	8%
TOTAL PERCENTAGES	46%	97%	21%

(3) Analyze results of resource inventories by asking:

(a) Are offerings balanced -- geographically, by staff positions, by content areas, grade levels? Are there systematic inequities in accessing activities?

(b) How do the frequencies of past continuing education content areas compare?

(c) Are activities diverse enough to meet various needs for information, for skill development, learning styles, scheduling preferences, etc.?

(d) What data is there on participation rates by categories of activities and personnel?

(e) Where are the gaps in content and activities?

(f) What are the reasons for gaps in content and activities? (Gaps may be due to lack of availability, accessibility, capacity, or continuity);

(4) Review use of activities to identify heavy- and light-user groups. Identify heavy-use groups (groups who are currently accessing available activities and may be interested in accessing more) and light-use groups (who may need additional or different activities or different marketing strategies);

(5) Review previous needs assessments and compare to current offerings;

(a) Identify changes in personnel needs across time and which needs appear to be met

(b) Identify consistencies in identified needs across years (which personnel and/or geographic areas experience repeated needs).

(6) Identify target subpopulations, topics, activities, and marketing strategies.

State Examples:

(1) Oregon's Department of Education, in conjunction with Portland State University, conducted a four-year research project to determine the effectiveness of training efforts to support local districts in implementing a supported education service delivery model for students with disabilities in neighborhood schools. The study included written surveys completed by 718 respondents in 11 elementary schools, interviews with 76 survey respondents, and observations of 47 students receiving special education services in general education classes. The results of the study reported on the percentage who had received training, which training topics were most helpful, which practices they were currently using, and needs for additional training at the district, building, and student levels.

References:

McKillip, J. (1987). Need analysis: Tools for the human services and education. Newbury Park, CA: Sage.

Oregon Department of Education, Office of Special Education. (1995). Special education professional development needs assessment. Salem, OR: Author.

SECTION VI: COMPREHENSIVE NEEDS ASSESSMENT PROCESS

An effective needs assessment process does not use a single indicator. Multiple indicators are more likely to present an accurate reflection of needs than a single indicator. Thus, an effective, comprehensive needs assessment process would:

- address all requirements under federal regulations and CSPD;
- contain a sample of personnel representative of all professionals and other interested parties (e.g., parents) specifically identified under CSPD;
- use multiple sources of information and data (e.g., reports, surveys, observations, documents, interviews, site visits, expert reviews);
- collect a variety of types of information (documents, surveys, monitoring citations, personnel evaluations, program evaluations);
- gather information covering all the significant aspects of the system of personnel development within a district, state, or region;
- collect input and perspectives of professionals at program, school, school division, regional, state, and in some instances national levels;
- collect input and perspectives of professionals involved in preservice and continuing education activities or programs;
- address the attitudes, knowledge, and skills of personnel;
- address the components, processes, and outcomes of organizations (e.g., schools) and systems (e.g., system of professional development activities within a state); and
- be flexible and responsive to changing needs.

State Example:

In addition to collecting data to meet the federal requirements under Parts B and H of the Individuals with Disabilities Education Act, one example of a state implementing a dynamic, comprehensive needs assessment process is Kansas. The process adopted by the Kansas State Board of Education represents a sampling of professionals at all levels covered under CSPD and includes multiple sources of data and information on personnel and organizational needs, and various analyses which produce a true representative list of needs.

Specifically, the Kansas process includes:

(1) Trainee data from Institutions of Higher Education (number fully certified, number provisionally certified, number of graduates);

(2) Kansas State Board of Education Personnel Data (number of professionals employed and number of vacancies);

(3) Attrition of Special Education Personnel in Kansas (rate and reasons for attrition);

(4) Institutions of Higher Education Study (survey of students enrolled in special education teacher programs at seven IHEs);

(5) Analyses leading to training topics data (data from monitoring citations of LEAs; Parent Calls Database; formal complaints; LEA due process hearings issues; U.S. Department of Education, Office of Special Education Programs citations);

(6) Field-identified staff development concerns (identified through surveys) and analysis of LEA inservice plans and their top priority needs;

(7) Staff development needs identified on Special Education Quality Performance Accreditation Applications;

(8) Analyses of evaluations of professional development activities;

(9) Concerns expressed by professional and parent associations; and

(10) SEA staff concerns (technical assistance training requests, consultants' perceived field training needs, professional training requests).

Kansas State Board of Education tabulated frequencies for all topics of identified needs and ranked ordered them. They selected the eleven top-ranked categories and developed a matrix identifying critical training areas/topics by data sources (See pages 34 through 43 in this document). For each topic area, they identified priority individuals for targeted training and the type of activity to be conducted (for awareness, knowledge and skill levels). In addition, they developed a Future Resources Inventory Matrix which outlined events planned for each priority topic.

References:

Kansas State Board of Education. (1994). Comprehensive System of Personnel Development Needs Assessment Process. Topeka, KS: Author.

Kansas State Board of Education. (1994). Kansas Comprehensive System of Personnel Development Continuing Education Plan. Topeka, KS: Author.

CRITICAL TRAINING AREAS/TOPICS IDENTIFIED BY DATA SOURCE

Data Source

Training Areas/ Topics	Kansas State Board of Education FY 93 Compliance Monitoring Citations Given to LEAs	Special Education Outcomes Team Parent Contacts	Formal Complaints to Special Education Outcomes Team	Local Education Agency Due Process Hearing Areas	OSEP On-Site Visit to KSBE Citations	Field Survey Results Obtained from Education Service Centers in Kansas	Local Education Agency Inservice Plans Submitted to KSBE	Special Education Quality Performance Accreditation Application Identified Staff Development Needs	Special Education Outcomes Team Training Activities Evaluation Results & Recommendations	Para-professional Facilitator Survey On Inservice Needs for Para-professional Staff	Families Together Satisfaction Survey Requests for Future Assistance	Kansas Association of School Psychologists Survey Results	Special Education Outcomes Team Technical Assistance Training Requests	Special Education Outcomes Team Program Consultants Perceived Field Training Needs	Special Education Outcomes Team Program Consultants Training Requests
Least Restrictive Environment	•	•	•	•											
Free Appropriate Public Education		•	•												
Individual Education Plan	•	•	•			•					•			•	
Supplementary Security Income											•				
Evaluation		•	•	•											
Placement			•	•											
Identification				•											

BEST COPY AVAILABLE

CRITICAL TRAINING AREAS/TOPICS IDENTIFIED BY DATA SOURCE

Data Source

Training Areas/ Topics	Kansas State Board of Education FY 93 Compliance Monitoring Citations Given to LEAs	Special Education Outcomes Team Parent Contacts	Formal Complaints to Special Education Outcomes Team	Local Education Agency Due Process Hearing Areas	OSEP On-Site Visit to KSBE Citations	Field Survey Results Obtained from Education Service Centers in Kansas	Local Education Agency Inservice Plans Submitted to KSBE	Special Education Quality Performance Accreditation Applications Identified Staff Development Needs	Special Education Outcomes Team Training Activities Evaluation Results & Recommendations	Para-professional Facilitator Survey On Inservice Needs for Para-professional Staff	Families Together Satisfaction Survey Requests for Future Assistance	Kansas Association of School Psychologists Survey Results	Special Education Outcomes Team Technical Assistants Training Requests	Special Education Outcomes Team Program Consultants Perceived Field Training Needs	Special Education Outcomes Team Program Consultants Training Requests
Submission of LEA Applications					•										
Preassessment Team	•								•						
Quality Performance Accreditation						•	•		•			•			
Procedural Due Process		•													
Confidentiality		•													
Educational Programming						•	•								
Inclusion						•	Cooperative Learning	•	•	•	•	•		•	•
Consultation												•			

BEST COPY AVAILABLE

CRITICAL TRAINING AREAS/TOPICS IDENTIFIED BY DATA SOURCE

Data Source

Training Areas/ Topics	Kansas State Board of Education FY 93 Compliance Monitoring Citations Given to LEAs	Special Education Outcomes Team Team Parent Contacts	Formal Complaints to Special Education Outcomes Team	Local Education Agency Due Process Hearing Areas	OSEP On-Site Visit to KSBE Citations	Field Survey Results Obtained from Education Service Centers in Kansas	Local Education Agency Inservice Plans Submitted to KSBE	Special Education Quality Performance Accreditation Application Identified Staff Development Needs	Special Education Outcomes Team Training Activities Evaluation Results & Recommendations	Para-professional Facilitator Survey On Inservice Needs for Para-professional Staff	Families Together Satisfaction Survey Requests for Future Assistance	Kansas Association of School Psychologists Survey Results	Special Education Outcomes Team Technical Assistants Training Requests	Special Education Outcomes Team Program Consultants Perceived Field Training Needs	Special Education Outcomes Team Program Consultants Training Requests
Technology						•	•						Computer Training		•
Behavior						•				•				•	
Curriculum						•	•							•	
Assessment						•	Math	•				•		•	
Administration						•								•	
Grading						•									
Effective Schools							•								
School Improvement							•								
Exemplary Programs for School Reform								•							
KSBE Policies& Procedures												•	•		
Communications													•		•

BEST COPY AVAILABLE

Special Education Outcomes Team Comprehensive System of Personnel Development
Needs Assessment Results Training Matrix

Individuals to Receive Training by Topic Area and Level of Training	Inclusion			Individual Education Plan			Least Restrictive Environment			Technology			Quality Performance Accreditation			Assessment			Evaluation			Behavior Management			Curriculum		
	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S
State Board Members	X	X					X						X	X									X				
Local Board Members	X	X					X						X	X									X				
KSBE Teams	X	X					X	X		X	X	X	X	X	X	X	X		X			X	X		X	X	
Spec. Ed. Outcomes Team	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X
Superintendents	X	X		X	X		X	X		X	X		X	X		X	X		X	X	X	X	X		X	X	
Administrators	X	X		X	X		X	X		X	X		X	X		X	X		X	X	X	X	X		X	X	
Principals	X	X		X	X		X	X		X	X		X	X		X	X		X	X	X	X	X		X	X	
General Ed. Teachers	X	X	X	X	X		X	X		X	X		X	X	X	X	X		X			X	X	X	X	X	X
Special Ed. Teachers	X	X	X	X	X		X	X		X	X		X	X	X	X	X		X			X	X	X	X	X	X
Related Service Providers	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X			X	X		X	X	X
Others	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X			X	X		X	X	X
Institutions of Higher Education Faculty	X	X		X	X		X	X		X	X	X	X	X		X	X										
Paraprofessionals	X	X	X										X	X								X	X				
Parents				X	X		X						X	X		X	X					X					
Students							X																				

Definitions:

A = Awareness - One time exposure for recognition of a topic
K = Knowledge - Understanding of topic with familiarity
S = Skill - Learning and Implementation of topic applications over time

BEST COPY AVAILABLE

Special Education Outcomes Team
Comprehensive System of Personnel Development
Needs Assessment Results Training Matrix

Type of Training Activities	Inclusion			Individual Education Plan			Least Restrictive Environment			Technology			Quality Performance Accreditation			Assessment			Evaluation			Behavior Management			Curriculum		
*	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S	A	K	S
National/State Conference/Workshop	X	X		X	X	X	X	X		X	X	X	X	X		X	X		X	X		X	X	X	X	X	X
Speaker/ Presentation	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X		X	X	X
Focus Group	X	X	X										X	X		X	X								X	X	
Retreat		X	X																								
Panel Presentation		X	X					X	X				X	X	X										X	X	
On-Site Visitation			X							X	X	X	X	X	X		X	X	X	X	X				X	X	X

* Definitions:

A = Awareness - One time exposure for recognition of a topic
K = Knowledge - Understanding of topic with familiarity
S = Skill - Learning and implementation of topic applications over time

Special Education Outcomes Team
Comprehensive System of Personnel Development
Needs Assessment Results Training Matrix

Possible Funding Source of Training Activity by Topic	Inclusion	Individual Education Plan	Least Restrictive Environment	Technology	Quality Performance Accreditation	Assessment	Evaluation	Behavior Management	Curriculum	Submission of LEA Application	Compliance Monitoring Team Training
Comprehensive System of Personnel Development	X		X	X	X				X		
Kansas Project Partnership	X								X		
Supported Education in Kansas	X	X	X		X				X		
Transition Services for Youth		X								X	
Dual Sensory Impairments	X		X		X						
Promoting Access for Children with Exceptionalities	X		X		X	X			X		
Traumatic Brain Injury Grant	X	X	X			X		X	X		
Attention Deficit Disorder Grant	X		X			X		X	X		
Special Education Outcomes Team	X	X	X	X	X	X	X	X		X	X
McRel					X						
MPRRC				X							X
PDC					X						
KSBE Board Support					X						

48

Special Education Outcomes Team
Comprehensive System of Personnel Development
Needs Assessment Results Training Matrix

Events Planned	Inclusion	Individual Education Plan	Least Restrictive Environment	Technology	Quality Performance Accreditation	Assessment	Evaluation	Behavior Management	Curriculum	Submission of LEA Application	Compliance Monitoring Team Training
Collborative Summer Institute for Inclusive Schools	X		X		X				X		
Due Process Hearing Officers Training											X
Submission of LEA Application Training										X	X
Monitoring Team Training										X	X
Traumatic Brain Injury Training	X	X	X			X		X	X		
Attention Deficit Disorder Training	X		X			X		X	X		
Portfolio Assessment					X	X					
Larry Brendtro ITV Hookup								X			

Events Planned	Inclusion	Individual Education Plan	Least Restrictive Environment	Technology	Quality Performance Accreditation	Assessment	Evaluation	Behavior Management	Curriculum	Submission of LEA Application	Compliance Monitoring Team Training
Play Based Assessment						X					
Internship Training	X					X			X		
IHE/Project Directors	X					X			X		
Positive Behavioral Supports								X			
Paraprofessional Statewide	X				X						
Restructuring Schools of All Kids	X		X						X		
Program Evaluation							X				
IEP Training		X									
Educational Advocate		X									
KASEA/KSBE Leadership Conference	X					X					

Events Planned	Inclusion	Individual Education Plan	Least Restrictive Environment	Technology	Quality Performance Accreditation	Assessment	Evaluation	Behavior Management	Curriculum	Submission of LEA Application	Compliance Monitoring Team Training
Integrated Delivery of Related Services	X	X	X		X				X		
Law Conference		X	X			X					
Inclusion Facilitator Training	X										
Section 504 Training			X								
Parent Advocate	X	X									X
Effective School Conference	X				X				X		
QPA Congress					X						
QPA Regionals					X						
QPA Technical Assistance				X	X						
Kansas Employment Board Training				X							

Events Planned	Inclusion	Individual Education Plan	Least Restrictive Environment	Technology	Quality Performance Accreditation	Assessment	Evaluation	Behavior Management	Curriculum	Submission of LEA Application	Compliance Monitoring Team Training
IMC Coordinators Conference				X							
MIS Training				X							
Project Interact				X							
Title VIB Grant Writing and Reviewing	X		X	X		X					
Training of Trainers for Inclusive Schools	X										
Mentoring Teachers	X										

SECTION VII: ANALYZING AND PRIORITIZING NEEDS

The completion of a needs analysis process puts into perspective problems confronting a target population, current activities and services available, and possible actions that might be taken (McKillip, 1987).

An important step is the integration of information for use in decision making and evaluation. Without program evaluation data, needs analyses become problem analyses, pointing to deficits but not necessarily giving guidance on intervention strategies. Without needs analyses, programs cannot be fully evaluated, they can only be described (McKillip, 1987).

A special warning is not to oversimplify the results of needs assessments. Overall frequencies of highest ranked categories of needs presents an unrealistic uniformity across all subpopulations, organizations, and geographical regions (Brinkerhoff, Brethower, Hluchyj, & Ridings Nowakowski, 1983). Needs will differ from location to location, by professionals and their characteristics.

Two different analyses of multiple data sources on needs are presented for review. One is a descriptive analysis which examines patterns of needs across data sources. Another process is one which examines significant relationships and variations between identified needs and data sources.

Descriptive Analysis of Patterns Across Data Sources

(1) Complete a matrix analysis of major categories of needs by critical variables. For example:

- (a) categories of needs by personnel roles;
- (b) categories of needs by agencies;
- (c) categories of needs by geographic regions;
- (d) categories of needs by data sources; and
- (e) categories of needs by different levels of the system (e.g., early childhood, elementary, middle or junior high, and senior high);

(2) Compute frequencies of ranking of needs by various factors and subpopulations (e.g., personnel roles, schools, regions);

(3) Compute frequencies across all subpopulations;

(4) Examine the differences in frequencies by factors and subpopulations;

(5) Identify what percentages of personnel within subgroups identified highest ranked categories of needs for percentage distributions;

(6) Identify patterns of needs within subgroups; and

(7) Identify dominant patterns across subgroups or factors.

State Example:

Kansas analyzed all the training needs obtained from multiple data sources. Each data source had equal weight. Kansas calculated and rank-ordered the topics based on frequencies. As a result of the frequencies, the top eleven ranked topics were identified for targeted activities. They developed a Needs Assessment Results Training Matrices listing the priority topics and the possible funding sources of training activities by topics, the events planned, the types of training activities by levels (awareness, knowledge, skill), and the individuals who will receive the training by topic area and level of training. (See pages 34 - 43 of this document).

References:

Kansas State Board of Education. (1994). Comprehensive System of Personnel Development Needs Assessment Process. Topeka, KS: Author.

Kansas State Board of Education. (1994). Kansas Comprehensive System of Personnel Development Continuing Education Plan. Topeka, KS: Author.

McKillip, J. (1987). Need analysis: Tools for the human services and education. Newbury Park, CA: Sage.

Determining Significant Relationships and Variations Between Identified Needs and Data Sources

It is important when analyzing the results of the needs assessment process, to explore and analyze important differences and variations in needs. Otherwise, one may assume that a consensus exists across all subpopulations, organizations, and geographical regions.

Suggested Questions to Consider:

(1) Will all data sources be given equal weight? Will some data sources carry more weight (e.g., assigning monitoring citations greater weights than personnel surveys)?

(2) Are variations in personnel needs related to differences in major factors (e.g., type of personnel represented, geographical location, availability of professional development activities)?

(3) Are variations in personnel needs related to other significant factors (e.g., student enrollment and diversity in schools)?

Analyses:

(1) Subgroup and Factor Analysis
For example:

How does the rating or ranking of needs vary by subgroups of the total population?

How do needs vary by geographical regions?

How do needs vary by location and size of the local education agencies?

(2) Organizational Analysis
For example:

How do needs vary by agencies (e.g., local education agencies)?

How do needs vary by school levels (e.g., early childhood, elementary, middle or junior high school, secondary school)?

(3) Analysis of Resource Inventory
For example:

Are there variations in availability of activities addressing needs?

Are there different patterns of participation in or use of current activities?

What identified needs are currently being addressed through available activities and resources?

Does the data suggest that needs could be addressed by:

(1) increasing the frequency of activities;
(2) offering new activities; or
(3) changing the activities?

(4) Where are there significant variations in need?
What are the possible reasons for significant variations?
What do the variations in need suggest?

(5) What trends in patterns of need are discernible? Are there changes and variations in needs that are associated with changes in size and diversity of student enrollment? Are there changes and variations in needs that are associated with educational reform? Are there changes and variations in needs associated with changes in service delivery models movement toward more inclusive delivery of services in general education?

(6) What needs appear to be on the decline? What needs appear to be increasingly identified from data sources? What appear to be the reasons for the decline and the increase? Why are some needs decreasing while others are increasing?

SECTION VIII: COMMUNICATING THE RESULTS OF NEEDS ASSESSMENT

Communicating the results of the needs assessment process is important because it often determines if and how the analysis will affect decisions (McKillip, 1987). It is recommended that the communication of results fit the purposes and interests of various audiences (McKillip, 1987). These might include making decisions, judgments, or comparisons.

Questions to Consider When Communicating Results

How might the information gathered be displayed, interpreted, and reported to answer questions?

What kinds of reports might be necessary for different audiences?

Suggestions for Reports

McKillip (1987) recommends that written needs analysis reports have an attractive layout, focus on the most important information for an audience, and be clearly written. In addition, reports should provide information to support the evaluation and analyses of these topics. Suggested sections for reports include:

- executive summary;
- description of model and methods used;
- summary of the results (description);
- interpretation of results (explanations offered about findings, speculations about relationships, reasons for findings);
- the implications of the needs assessment; and
- recommendations.

Reference:

McKillip, J. (1987). Need analysis: Tools for the human services and education. Newbury Park, CA: Sage.

REFERENCES

Borg, W. & Gall, M. (1989). Educational research. 4th Edition. New York: Longman.

Brinkerhoff, R., Brethower, D., Hluchyj, T., & Ridings Nowakowski, J. (1983). Program evaluation: A practitioner's guide for trainers and educators. Boston: Kluwer-Nijhoff.

Colorado Department of Education. (1994). Fiscal Years 1995-97 State Plan under Part B of the Individuals with Disabilities Education Act as Amended by Public Law 94-142. Denver, CO: Author.

Connecticut State Department of Education, Division of Education Support Services. (1993). State plan for the Individuals with Disabilities Education Act, Fiscal Years 1993-1995. Middletown, CT: Author.

Connecticut CSPD Council. (1994). Assistive Technology Forum. Middletown, CT: Special Education Resource Center.

Converse, J., & Presser, S. (1986). Survey questions: Handcrafting the standardized questionnaire. Beverly Hills, CA: Sage.

Corcoran, T. (1995). Transforming professional development for teachers: A guide for state policymakers. Washington, DC: National Governor's Association, Center for Policy Research.

Council for Exceptional Children. (1994). CEC standards for professional practice in special education. Reston, VA: Author.

Georgia Department of Education, Office of Special Services, Division for Exceptional Students. (1993). Special Education State Program Plan FY 94-96. Atlanta: Author.

Henry, G. (1990). Practical sampling. Newbury Park, CA: Sage Publications.

Innocenti, M., Killoran, J., & Christensen, J. (1994). Let's do a needs assessment: A cautionary note. The Utah Special Educator, 14, 21.

Kansas State Board of Education. (1994). Comprehensive System of Personnel Development Needs Assessment Process. Topeka, KS: Author.

Kansas State Board of Education. (1994). Kansas Comprehensive System of Personnel Development Continuing Education Plan. Topeka, KS: Author.

Kentucky General Assembly, Office of Education Accountability. (1994). Annual report. Frankfort, KY: Kentucky General Assembly, Office of Education Accountability.

Kingery, D. (1988). Needs assessment in special education: Survey administration. In Planning a Needs Assessment Management System (PANAMS). Athens, Ga: University of Georgia, Project PANAMS.

Louisiana Department of Education, Office of Special Education Services. (1994). Louisiana Special Education State Plan for Fiscal Years 1994-1996. Baton Rouge, LA: Author.

McKillip, J. (1987). Need analysis: Tools for the human services and education. Newbury Park, CA: Sage.

Minnesota Department of Education. (1993). Minnesota's Special Education Plan for Fiscal Years 1994-96. St. Paul, Minn: Author.

Misanchuk, E. (1984). Analysis of multi-component educational and training needs. Journal of Instructional Development, 7, 28-33.

National Association of Secondary School Principals. Searching for excellence: Assessment and development programs provide solutions. Reston, VA: Author.

National Staff Development Council. (1994). National Staff Development Council's Standards for Staff Development: Middle Level Edition. Oxford, Ohio: Author.

Networking System for Training Education Personnel. (1994). A report on the personnel supply and demand data collected by states. Alexandria, VA: Author.

Oregon Department of Education, Office of Special Education. (1995). Special education professional development needs assessment. Salem, OR: Author.

Popham, J. (1975). Educational evaluation. Englewood Cliffs, NJ: Prentice Hall.

Roth, J. (1977). Needs and the needs assessment process. Evaluation News, 5, 15-17.

Schwartz, B., & Horne, R. (1995, May). CSPD collaboration for change: A social marketing perspective. Presentation at the 1995 CSPD Conference for Leadership and Change, Arlington, VA.

Savar, C. (1994, May). Power marketing: 7 steps to success. Keynote speech at 1994 CSPD Conference for Leadership and Change, Washington, DC.

APPENDICES

TIPS ON THE USE OF SURVEYS

Surveys provide one of the few techniques for the study of attitudes, values, beliefs, and motivators. However, surveys depend heavily on respondents' motivation and ability to respond. Surveys are open to memory decay and bias and completion of surveys may express biases.

It's easier for respondents to answer questions of personal fact rather than questions about opinions and attitudes. Keep questions to less than 20 words in length. Use the simplest wording possible. Easy questions, such as sex and age, .are generally given at the beginning of a survey to warm up respondents without threatening them. Riskier questions often come later in the survey. A few easy questions are given at the end of the survey to provide some tension relief. Specific questions are better than general questions. Avoid negatively stated questions as negative words are often overlooked. Instead of using technical terms or jargon, use standard spoken English in short, forced choice questions (e.g., not agree/disagree) or statements. Open-ended questions demand more motivation and time on the part of respondents to answer. Don't use double-barreled questions that ask a person to respond to more than one issue or objective at a time.

Rating formats are simpler for respondents and allow respondents to express disinterest. Ranking formats confront a respondent with the question, "how should various needs be ordered by importance."

Respondents may find it difficult to admit lack of interest in training experiences or they may overestimate the frequency or strength of popular interests or attitudes. They may be reluctant to admit that there are certain problems. Most individuals try to give answers that make them appear well-adjusted, unprejudiced, rational, open-minded and democratic. Offer a no opinion option.

Nonresponse rates of 10 to 20% will produce significant bias (Henry, 1990). A sample study of nonrespondents should be conducted after follow-up strategies have been tried. If more than 20 percent are missing, select a small number of people from the nonresponding group, and try a telephone interview. Compare the results with the responders.

ADDITIONAL RESOURCES ON NEEDS ASSESSMENT

Bailey, D., Buysee, V., Edmondson, R., & Smith, T. (1992). Creating family-centered services in early intervention: Perceptions of professionals in four states. Exceptional Children, 58, 298-309.

Cannon, G., Idol, L., & West, J. (1992). Educating students with mild handicaps in general classrooms: Essential teaching practices for general and special educators. Journal of Learning Disabilities, 25, 300-317.

Carri, L. (1985). Inservice teachers' assessed needs in behavioral disorders, mental retardation, and learning disabilities: Are they similar? Exceptional Children, 51, 411-416.

Cline, B., Billingsley, B., & Radcliffe, P. (1991a). Assessment of staff development needs for related service personnel and classroom aides. Report submitted to Virginia Department of Education.

Cline, B., Radcliffe, P., Billingsley, B., Schetz, K., Egner, S., & Cross, L. (1991b). Assessment of staff development needs for special education teachers and speech-language pathologists. Report submitted to Virginia Department of Education.

Fowler, F. (1988). Survey research methods. (Applied Social Research Methods Series, Vol. 1) (rev. ed.). Beverly Hills, CA: Sage.

Hord, S., Rutherford, W., Huling-Austin, L., & Hall, G. (1987). Taking charge of change. Alexandria, VA: Association for Supervision and Curriculum Development.

Isaacson, S., Prehm, H., & McCoy, K. (1985). Teacher ratings of teaching behaviors derived from the research literature. Teacher Education and Special Education, 8, 83-90.

Johnson, M., Lubker, B., & Fowler, M. (1988). Teacher needs assessment for the educational management of children with chronic illness. Journal of School Health, 58, 232-235.

Johnston, N. (1990). School consultation: The training needs of teachers and school psychologists. Psychology in the Schools, 27, 51-56.

Jones, L. & Hayes, A. (1980). How valid are surveys of teacher needs? Educational Leadership, 37, 390-392.

Labaw, P. (1980). Advanced questionnaire design. Cambridge, MA: Abt Books.

Lessen, E., & Frankiewicz, L. (1992). Personal attributes and characteristics of effective special education teachers: Considerations for teacher educators. Teacher Education and Special Education, 15, 124-132.

Leyser, Y. & Abrams, P. (1986). Perceived training needs of regular and special education student teachers in the area of mainstreaming. Exceptional Children, 33, 173-180.

Linsky, A. (1975). Stimulating responses to mailed questionnaires: A review. Public Opinion Quarterly, 39, 82-101.

Misanchuk, E. (1984). Analysis of multi-component educational and training needs. Journal of Instructional Development, 7, 28-33.

Odell, S., Loughlin, C., & Ferraro, D. (Winter, 1986-87). Functional approach to identification of new teacher needs in an induction context. Action in Teacher Education, 8, 51-57.

Ondrovich, P. (1989). Staff development: Meeting teachers' psychological and professional needs. ERS Spectrum, 7, 22-25.

Orlich, D. (1978). Designing sensible surveys. Pleasantville, NY: Redgrave.

Platt, J., & Olson, J. (1990). Why teachers are leaving special education: Implications for preservice and inservice educators. Teacher Education and Special Education, 13, 192-196.

Radcliffe, P. (1992). A comparison of staff development needs of beginning and experienced special education teachers of the mildly disabled. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.

Reeves, C. & Kazelskis, P. (1985). Concerns of preservice and inservice teachers. Journal of Educational Research, 78, 267-271.

Rosenholtz, S. (1989). Workplace conditions that affect teacher quality and commitment: Implications for teacher induction programs. The Elementary School Journal, 89, 421-439.

Steadham, S. (1980). Learning to select a needs assessment strategy. Training and Development Journal, 56-61.